

# NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

## F A C T      S H E E T

(pursuant to NAC 445A.236)

**Permittee Name:** City of Mesquite  
10 East Mesquite Boulevard  
Mesquite, Nevada 89027

**Permit Number:** NEV40011

### **Description of Discharge**

**Location:** City of Mesquite Water Reclamation Facility  
600 Riverside Road  
Mesquite, Nevada 89027

Latitude: 35° 47' 35"N; Longitude: 114° 05' 33"W

**Characteristics:** The City of Mesquite operates a water reclamation facility designed to treat domestic and commercial sewage to meet tertiary standards of treatment. Treatment is provided via an extended aeration, activated sludge process and filtration, with a parallel system with an aerated pond, wetlands, subsurface wetlands, and an overland flow terrace system. The effluent is denitrified to less than 10 mg/L total Nitrogen and is filtered and disinfected via UV and chlorination to meet the 2.2 fecal coliform standard for reuse. The plant expansion, currently under construction, will include the addition of lined effluent storage reservoirs in Pulsipher and Abbott Washes with a pump station and piping to deliver treated effluent to those reservoirs for winter storage and summer reuse. Treated effluent is delivered to several golf courses and a small park for irrigation reuse of turf grass and other plant materials. Onsite landscape irrigation, dust control and construction uses are also authorized.

**Flow:** 3.50 MGD 30-day average design flow; wetlands 1.2 MGD  
Influent flow and effluent flow to reuse or storage is monitored.

**Permit Monitoring:** The Effluent parameters monitored are:

CBOD <sub>5</sub> : (inhibited)	Total Suspended Solids:
pH:	Fecal Coliform:
Total Nitrogen as N:	Total Phosphorus as P:
Ammonia as N:	Nitrate as N:

Groundwater monitoring parameters are:

TDS, Nitrate as N, Chloride, Total Nitrogen as N, and Total Phosphorus as P.

**General:** The continued high-rate of both seasonal and normal growth in Mesquite has necessitated the expansion of the present wastewater treatment plant's capacity to store treated effluent during the winter when reuse needs are less on the golf courses, and flows are greater due to the snowbird transient population shifts. Formerly effluent in excess of reuse needs was disposed in the off season by means of percolation in a series of Rapid Infiltration Basins (RIBS) which have since been removed and the area developed. The golf course properties are all located north of the plant facility and the I-15 freeway, and the City of Mesquite proper. Monitoring and sampling are required to ensure quality of reuse water.

**Receiving Water Characteristics:** The receiving water is groundwater. The depth to groundwater is in excess of 100 feet at the golf course sites. Shallow groundwater quality in the area meets drinking water standards with the exception of TDS which is as high as 5000 mg/l.

**Procedures for Public Comment:**

The Notice of the Division's intent to reissue a permit authorizing the facility to discharge to the Waters of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Las Vegas Review-Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of publication of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted to accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

**Proposed Determination**

The Division has made the tentative determination to reissue the proposed permit. The permit will be for a five (5) year period.

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**Proposed Effluent Limitations, Schedule of Compliance and Special Conditions**

See Permit.

**Rationale for Permit Requirements**

Monitoring is required to assess the level of treatment provided to ensure the effluent meets standards for reuse.

Prepared by: Icyl C, Mulligan  
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